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Rollhaus et al.

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[54] **KEYBOARD ENTRY SYSTEM**

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[52] **U.S. Cl.** ..... **340/365 R**; 340/365 E; 340/365 S; 400/100; 364/709

[58] **Field of Search** ..... 340/365 R, 365 S, 365 E; 364/709; 400/91-93, 87, 100, 109-111, 482

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[57] **ABSTRACT**

A keyboard entry system is disclosed which comprises a keyboard which includes a plurality of letter keys, one for each letter of a selected language. The entry system responds to conventional sequential activation of individual keys by providing output signals indicative of the respective individual letters associated with the activated keys to an application program such as a word processor or printer control program. The keyboard entry system also responds to chords of simultaneously activated multiple keys by using these chords to retrieve stored words from a dictionary. It is the stored words rather than the entered chords which are applied as inputs to the application program. This system allows an operator to use both conventional sequential key entry techniques and chorded entry techniques for rapid data entry. Chords are detected by comparing a stored constant with the elapsed time between a key release and the immediately preceding key depression of an overlapping key. The overlapping keys are characterized as a chord when the elapsed time is greater than the stored constant. A biofeedback mechanism alerts the operator of inadvertent chords.

22 Claims, 7 Drawing Figures